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=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:50:44 ON 29 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 AUG 2007 HIGHEST RN 945714-55-6 DICTIONARY FILE UPDATES: 28 AUG 2007 HIGHEST RN 945714-55-6

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\Angela\Struc 1.str

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS L1 STR / Structure 1 in file .gra / Structure attributes must be viewed using STN Express query preparation.

=> 11 SAMPLE SEARCH INITIATED 08:50:59 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 7909 TO ITERATE

25.3% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01 24 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

152849 TO 16351

PROJECTED ITERATIONS: 152849 TO 163511 PROJECTED ANSWERS: 1314 TO 2482

L2 24 SEA SSS SAM L1

=> 11 full FULL SEARCH INITIATED 08:51:09 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 157820 TO ITERATE

100.0% PROCESSED 157820 ITERATIONS 2060 ANSWERS SEARCH TIME: 00.00.01

L3 2060 SEA SSS FUL L1

=> Uploading C:\Program Files\Stnexp\Queries\Angela\Struc 2.str

L4 STRUCTURE UPLOADED

=> d
L4 HAS NO ANSWERS
L4 STR
/ Structure 2 in file .gra /

Structure attributes must be viewed using STN Express query preparation.

=> 14 SAMPLE SEARCH INITIATED 08:51:28 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 498 TO ITERATE

100.0% PROCESSED 498 ITERATIONS 25 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

PROJECTED ITERATIONS: 8622 TO 11298

PROJECTED ANSWERS: 200 TO 800

L5 25 SEA SSS SAM L4

=> 14 full FULL SEARCH INITIATED 08:51:37 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -

100.0% PROCESSED 9557 ITERATIONS

SEARCH TIME: 00.00.02

L6 638 SEA SSS FUL L4

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION 344.20 344.41

638 ANSWERS

FULL ESTIMATED COST

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FILE COVERS 1907 - 29 Aug 2007 VOL 147 ISS 10 FILE LAST UPDATED: 28 Aug 2007 (20070828/ED)

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http://www.cas.org/infopolicy.html

=> 13 and 16

4943 L3

1794 L6

L7 305 L3 AND L6

=> 17 and glass

754184 GLASS

L8 62 L7 AND GLASS

=> 17 and silicon

840422 SILICON

L9 51 L7 AND SILICON

=> 18 or 19

L10 101 L8 OR L9

=> d ibib abs hitstr 91-101

L10 ANSWER 91 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1993:523432 CAPLUS <<LOGINID::20070829>>

DOCUMENT NUMBER:

119:123432

Manufacture of fluorine-containing hydrophobic silica TITLE:

films by sol-gel process

INVENTOR(S):

Tsucha, Toshio

PATENT ASSIGNEE(S):

Murakami Kaimeido KK, Japan Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

APPLICATION NO. DATE KIND _____ _ _ _ _ _____

_____ JP 1991-175782 19910621 19930514 JP 05116989 A

B2 19970319 JP 2592018

19910621 JP 1991-175782 PRIORITY APPLN. INFO.:

The films are formed on a substrate (***glass*** , or metal) with high bonding strength by sol-gel process from a starting material contg. water, solvent, catalyst, Si alkoxide, and F-contg. alkoxide. Preferably, the Si alkoxide is selected from SiOCH3)4, Si(OC2H5)4, Si(OC3H9)4, and/or

Si(OC3H7)4, and the F-contg. alkoxide is selected from

CF3 (CF2) nCH2 - CH2 SiCl3 (n = 0, 5, 7) or CF3 (CF2) nCH2 - CH2 Si(OCH3) 3 (n = 0,

5, 7).

85857-16-5 ***83048-65-1*** ***429-60-7*** IT

RL: USES (Uses)

(in manuf. of fluorine-contg. hydrophobic silica films by sol-gel process, for bonding strength with substrate)

429-60-7 CAPLUS RN

Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN

/ Structure 3 in file .gra /

83048-65-1 CAPLUS RN

Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)

/ Structure 4 in file .gra /

85857-16-5 CAPLUS RN

Silane, trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA CN INDEX NAME)

/ Structure 5 in file .gra /

L10 ANSWER 92 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1993:259795 CAPLUS <<LOGINID::20070829>>

DOCUMENT NUMBER:

118:259795

TITLE:

Water-repellent products, and their manufacture

Hirayama, Naoto; Nagayama, Hirotsugu; Takigawa, Akio; INVENTOR(S):

Kitaoka, Masaki

PATENT ASSIGNEE(S):

Nippon Sheet Glass Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE KIND PATENT NO. _____ _____ _ _ _ _ ______ EP 1992-116887 19921002 19930407 A1 EP 535691 R: DE, FR, GB 19911004 JP 1991-257275 19930420 JP 05097474 Α A 19911004 JP 1991-257275 PRIORITY APPLN. INFO.: MARPAT 118:259795 OTHER SOURCE(S): The water-repellent products consists of a substrate and a dense SiO2 film AB contg. a waterproofing agent comprising .gtoreq.1 compds. of an org. Si compd. and an org. F compd., which film is formed by contacting the substrate with a waterproofing agent-contg. aq. H2SiF6 soln. supersatd. in SiO2. The waterproofing agent has general formula R1mSiR2n (R1 = C1-20-alkyl, fluoroalkyl or alkyl or fluoroalkyl contg. -O-, -CO2-, -SO2N(C3H7)-, or -CONH- in the chain; R2 = Cl or C1-6-alkoxy; m = 1, 2 or 3; m + n = 4). This method is esp. suitable for the manuf. of weatherand abrasion-resistant lenses and windshields of inorg. and org. ***glass*** . A 4M H2SiF6 soln. satd. with SiO2 gel (.apprx.20 g/L) was dild. with water to 2.5M, aged at 30.degree. for 1 h, after which a 50-wt.% soln. of heptadecafluorodecyltrimethoxysilane in EtOH in amts. of 3 cm3/300 cm3. A ***glass*** plate was immersed in the mixt. at 30.degree. for 6 h, washed with water, and dried to give a water-repellent coating having contact angle 120.degree., and 97.degree. after abrasion. ***83048-65-1*** ***429-60-7*** IT RL: USES (Uses) (waterproofing agent, silica gel-satd. hexafluorosilicic acid solns. contg., coating with, by immersion, of org. and inorg. lenses and windshields, for weather and abrasion resistance) 429-60-7 CAPLUS RN Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN / Structure 6 in file .gra / 83048-65-1 CAPLUS RN Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluorodecyl)trimethoxy- (CA INDEX NAME) / Structure 7 in file .gra /

L10 ANSWER 93 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:596589 CAPLUS <<LOGINID::20070829>>

DOCUMENT NUMBER: 117:196589

TITLE: Ceramic coating of nonferrous metals for

hydrophobicity and endurance

INVENTOR(S): Murakami, Megumi; Uchida, Yukio; Izumi, Keiji; Tanaka,

Hidetoshi; Emura, Masakazu

PATENT ASSIGNEE(S): Nisshin Steel Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. ______ ----_____ JP 1990-256398 19900926 19920511 Α JP 04136181 JP 1990-256398 19900926 PRIORITY APPLN. INFO.: The nonferrous metal is coated with a hydrophobic inorg. oxide film for endurance. The inorg. oxide film is a fluoroalkylsilane-contg. oxide of Al, Zr, Ti, Si, W, Ce, Sn, and/or Y. For coating, an org. solvent contg. .gtoreq.0.005 wt.% alkoxide, monomethylalkoxide, and/or acetylacetonate of Al, Zr, Ti, Si, W, Ce, Sn, and/or Y and 0.005-0.30 mol% (based on the above contents) fluoroalkylsilane is used and dried at 150-450.degree.. The contact angle with water of the coated inorg. oxide film is 100-119.degree.. ***83048-65-1*** ***429-60-7*** IT RL: USES (Uses) (coating with inorg. film contg., on nonferrous metal, for hydrophobicity and endurance) 429-60-7 CAPLUS RN Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN / Structure 8 in file .gra / 83048-65-1 CAPLUS RN

Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)

/ Structure 9 in file .gra /

L10 ANSWER 94 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1991:656270 CAPLUS <<LOGINID::20070829>>

DOCUMENT NUMBER:

115:256270

TITLE:

Synthesis and properties of fluorine-containing

organosilicon compounds by the reactions of vinyl- and

allylsilanes with fluoroalkanoyl peroxides

Sawada, Hideo; Gong, Yue Fa; Matsumoto, Takeo; Nakayama, Masaharu; Kosugi, Masanori; Migita,

Toshihiko

CORPORATE SOURCE:

Tsukuba Res. Lab., Nippon Oil Fats Co., Ltd., Tsukuba,

300-26, Japan

SOURCE:

AUTHOR(S):

Yukagaku (1991), 40(9), 730-7 CODEN: YKGKAM; ISSN: 0513-398X

DOCUMENT TYPE:

Journal Japanese

LANGUAGE:

CASREACT 115:256270

OTHER SOURCE(S):

Reaction of (RCO2)2O [I, R = C3F7, C6F13, CF(CF3)OC3F7, CF(CF3)OCF2CF(CF3)OC3F7] with R13SiCH:CH2 (R1 = Me, MeO, EtO) gave R(CH2CHSiR13)nR (n = 2,3) whereas reaction of I with R23SiCH2CH:CH2 (R2 = Me, MeO, EtO, Me3SiO) gave R23SiCH2CH(OCOR)CH2R. The synthesis of these ***silicon*** compds. is possible under mild fluorine-contg. conditions (30-40.degree. C) and products bearing alkoxy group have good

```
water- and oil-repellency.
                                                     ***135131-81-6P***
                              ***135131-80-5P***
      ***135131-79-2P***
IT
                                                     ***135179-25-8P***
                             ***135131-83-8P***
       ***135131-82-7P***
                                                     ***137425-24-2P***
                              ***137425-23-1P***
       ***137425-21-9P***
                                                     ***137451-33-3P***
                              ***137451-32-2P***
       ***137425-26-4P***
                              ***137451-35-5P***
      ***137451-34-4P***
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     135131-79-2 CAPLUS
RN
     2,8-Dioxa-3,7-disilanonane, 4-(2,2,3,3,4,4,4-heptafluorobutyl)-6-
CN
     (heptafluoropropyl)-3,3,7,7-tetramethoxy- (9CI) (CA INDEX NAME)
/ Structure 10 in file .gra /
     135131-80-5 CAPLUS
     4,7,14,17-Tetraoxaeicosane, 1,1,1,2,2,3,3,5,6,6,8,13,15,15,16,18,18,19,19,
RN
     20,20,20-docosafluoro-5,8,13,16-tetrakis(trifluoromethyl)-9,11-
CN
     bis(trimethoxysily1) - (9CI) (CA INDEX NAME)
/ Structure 11 in file .gra /
/ Structure 12 in file .gra /
      135131-81-6 CAPLUS
      2,10-Dioxa-3,9-disilaundecane, 4-(2,2,3,3,4,4,4-heptafluorobutyl)-8-
 RN
      (heptafluoropropyl)-3,3,9,9-tetramethoxy-6-(trimethoxysilyl)- (9CI) (CA
 CN
      INDEX NAME)
 / Structure 13 in file .gra /
      135131-82-7 CAPLUS
      2,10-Dioxa-3,9-disilaundecane, 3,3,9,9-tetramethoxy-4-[1,2,2,2-tetrafluoro-
 RN
 CN
      1-(heptafluoropropoxy)ethyl]-8-[2,3,3,3-tetrafluoro-2-
      (heptafluoropropoxy)propyl]-6-(trimethoxysilyl)- (9CI) (CA INDEX NAME)
 / Structure 14 in file .gra /
      135131-83-8 CAPLUS
      4,7,16,19-Tetraoxadocosane, 1,1,1,2,2,3,3,5,6,6,8,15,17,17,18,20,20,21,21,
 RN
 CN
      22,22,22-docosafluoro-5,8,15,18-tetrakis(trifluoromethyl)-9,11,13-
      tris(trimethoxysilyl) - (9CI) (CA INDEX NAME)
 / Structure 15 in file .gra /
  / Structure 16 in file .gra /
      135179-25-8 CAPLUS
      2,8-Dioxa-3,7-disilanonane, 3,3,7,7-tetramethoxy-4-[1,2,2,2-tetrafluoro-1-
  RN
  CN
       (heptafluoropropoxy)ethyl]-6-[2,3,3,3-tetrafluoro-2-
       (heptafluoropropoxy)propyl] - (9CI) (CA INDEX NAME)
```

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/ Structure 17 in file .gra / -
    137425-21-9 CAPLUS
RN
    Silane, [4,4,5,5,6,6,6-heptafluoro-1(or 2)-hexenyl]trimethoxy- (9CI) (CA
CN
    INDEX NAME)
    CM
         1
     CRN 137425-20-8
     CMF C9 H15 F7 O3 Si
/ Structure 18 in file .gra /
     137425-23-1 CAPLUS
RN
     Silane, triethoxy[4,4,5,5,6,6,6-heptafluoro-1(or 2)-hexenyl]- (9CI)
CN
     INDEX NAME)
     CM
          1
     CRN 137425-22-0
     CMF C12 H21 F7 O3 Si
/ Structure 19 in file .gra /
     137425-24-2 CAPLUS
RN
     Silane, trimethoxy[4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluoro-1(or
     2)-nonenyl]- (9CI) (CA INDEX NAME)
          1
     CM
     CRN 121432-32-4
     CMF C12 H15 F13 O3 Si
/ Structure 20 in file .gra /
     137425-26-4 CAPLUS
     Silane, triethoxy[4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluoro-1(or
     2)-nonenyl]- (9CI) (CA INDEX NAME)
     CM
          1
     CRN 137425-25-3
     CMF C15 H21 F13 O3 Si
/ Structure 21 in file .gra /
     137451-32-2 CAPLUS
RN
     Butanoic acid, heptafluoro-, 3,3,4,4,5,5,5-heptafluoro-1-
     [(trimethoxysilyl)methyl]pentyl ester (9CI) (CA INDEX NAME)
```

```
/ Structure 22 in file .gra /
    137451-33-3 CAPLUS
RN
    Butanoic acid, heptafluoro-, 3,3,4,4,5,5,5-heptafluoro-1-
CN
     [(triethoxysily1)methyl]pentyl ester (9CI) (CA INDEX NAME)
/ Structure 23 in file .gra /
    137451-34-4 CAPLUS
    Heptanoic acid, tridecafluoro-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-1-
CN
     [(trimethoxysily1)methyl]octyl ester (9CI) (CA INDEX NAME)
/ Structure 24 in file .gra /
RN
    137451-35-5 CAPLUS
    Heptanoic acid, tridecafluoro-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-1-
CN
     [(triethoxysilyl)methyl]octyl ester (9CI) (CA INDEX NAME)
/ Structure 25 in file .gra /
L10 ANSWER 95 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN
                       1991:516030 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        115:116030
                        Agriculture plastic films with mist-preventing effects
TITLE:
                        Harada, Kiyoshi; Nishikata, Akira; Yamamoto, Yasushi
INVENTOR(S):
                        Shin-Etsu Chemical Industry Co., Ltd., Japan; C. I.
PATENT ASSIGNEE(S):
                        Kasei Co., Ltd.
                        Jpn. Kokai Tokkyo Koho, 8 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
                        Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                         APPLICATION NO.
                                                                DATE
     PATENT NO.
                        KIND DATE
                               _____
                                          _____
                        ----
                         Α
                                                                 19890706
                               19910327
                                          JP 1989-175282
     JP 03072549
                                           JP 1989-175282
                                                                 19890706
PRIORITY APPLN. INFO.:
    The title films contain F-contg. org. Si compd. surfactants
     R1ASiMe3-n[(OSiMe2)mZO(CxH2xO)yR]n or R1ASiMe2(OSiMe2)mZO(CxH2xO)yZ(SiMe2O
     )mSiMe2AR1 (R1 = C4-20 fluoroalkyl or ether; R = H or C1-10 hydrocarbyl;
     A, Z = divalent org. group; m = 0 or 1, n = 1-3, x = 2 or 3, y = 1-50).
     Thus, PVC 100, DOP 45, tricresyl phosphate 3,
     F17C8CH2CH2SiMe2(CH2)3O(CH2CH2O)10Me (I) 0.1, and additives 7 parts were
     blended and calendered to give a 100-.mu.m film having good
     mist-preventing effects, vs. poor for a film without I.
       IT
     RL: USES (Uses)
        (surfactants, plastics contg., for mist-preventing agriculture films)
RN
     133068-40-3 CAPLUS
     3,6,9,14,16,21,24,27-Octaoxa-13,15,17-trisilanonacosane-1,29-diol,
CN
     15-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-15-[[[3-[2-
     [2-(2-hydroxyethoxy)ethoxy]ethoxy]propyl]dimethylsilyl]oxy]-13,13,17,17-
```

tetramethyl- (9CI) (CA INDEX NAME)

```
/ Structure 26 in file .gra /
    135805-93-5 CAPLUS
RN
    3,6,9,14,16,21,24,27-Octaoxa-13,15,17-trisilanonacosane-1,29-diol,
CN
    15-[[[3-[2-[2-(2-hydroxyethoxy)ethoxy]ethoxy]propyl]dimethylsilyl]oxy]-
    13,13,17,17-tetramethyl-15-[3,4,4,4-tetrafluoro-3-(heptafluoropropoxy)-2-
    methylbutyl] - (9CI) (CA INDEX NAME)
/ Structure 27 in file .gra /
/ Structure 28 in file .gra /
L10 ANSWER 96 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN
                        ACCESSION NUMBER:
                        114:166515
DOCUMENT NUMBER:
                        Coating materials on the openings of containers for
TITLE:
                        the prevention of sagging of contents
                        Takenaka, Yoshiaki
INVENTOR(S):
                        Toyo Ink Mfg. Co., Ltd., Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 3 pp.
SOURCE:
                        CODEN: JKXXAF
                        Patent
DOCUMENT TYPE:
                        Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                         APPLICATION NO.
                                                                DATE
                        KIND
                               DATE
     PATENT NO.
                                                                 _____
                                           ______
                        ----
     _____
                                                                 19890609
                                          JP 1989-147389
                               19910121
                         Α
     JP 03012467
                         B2
                               19970226
     JP 2584512
                                                                 19890609
                                           JP 1989-147389
PRIORITY APPLN. INFO.:
     The title materials are low condensates of alkoxysilyl group- and F-contg.
     org. Si compds. which are esp. useful on ***glass*** containers.
     Thus, XC95-418 2, methanone 95, water 4.8, and AcOH 0.2 g were hydrolyzed
     24 h, coated on ***glass*** , and dried to prep. a coating having
     contact angle with water 86.degree. and with salad oil 64.degree., vs. 23
     and 16, resp., without the coating.
       ***429-60-7D*** , XC95-418, hydrolyzed
                                              ***83048-65-1*** , XC95-470
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (coatings, on container openings, for preventing sagging of contents)
     429-60-7 CAPLUS
RN
     Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME)
CN
/ Structure 29 in file .gra /
     83048-65-1 CAPLUS
RN
     Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
CN
     heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
```

/ Structure 30 in file .gra /

L10 ANSWER 97 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1990:592978 CAPLUS <<LOGINID::20070829>>

DOCUMENT NUMBER:

113:192978

TITLE:

Heat-resistant fluoropolymer composition as cladding

for optical fibers

INVENTOR(S):

Yamamoto, Takashi; Matsumoto, Tsuruyoshi; Kobayashi,

Tadao; Shimada, Katsuhiko

PATENT ASSIGNEE(S):

Mitsubishi Rayon Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 357354	A2	19900307	EP 1989-308657	19890825
EP 357354	A3	19910911		
EP 357354	B1	19941026		
R: DE, GB, IT,	NL			
JP 02153964	Α	19900613	JP 1989-214885	19890823
JP 08019317	В	19960228		
US 5117480	A	19920526	US 1991-642567	19910118
US 5223561	Α	19930629	US 1991-802858	19911206
PRIORITY APPLN. INFO.:			JP 1988-212339 A	19880829
TRIORITI III I			US 1989-398917 B:	1 19890828
			US 1991-642567 A	3 19910118

A fluoro polymer compn., having good heat and thermal degrdn. resistance AB and processability, and useful as a cladding for optical fibers, comprises 60-99.8% copolymer of perfluoro-2,2-dimethyl-1,3-dioxole (I) with .gtoreq.1 ethylenically unsatd. monomer and 0.2-40% a compd. having hydrocarbon group contg. .gtoreq.1 F atom and .gtoreq.1 functional group selected from the group of OH, SR, CO2H, SO, SO2, CONH, CO2CO, NH, CONHCO, CO2, CN, NCO, CO, HCO2, NH2, SO3H, NHNH2, CONH2, CH:CH2, NH, (RO)nX3-nSi (R = C1-5 alkyl; n = 0-3; X halogen, C1-5 alkyl). Thus, a soln. of 100 wt. parts I-tetrafluoroethylene copolymer and 2 wt. parts 3,3,3-trifluoropropyltrimethoxysilane and Florinate FC-75 (contg. 25 wt.% solids) was coated onto the surface of a quartz ***qlass*** fiber and then dried at 100.degree. to form a core cladding. The optical fiber showed a light attenuation 10.5 dB/km at 850 nm, and an increase in light attenuation of 1 dB/km after aging for 4000 h at 150.degree..

429-60-7 IT

83048-65-1

RL: USES (Uses)

(claddings contg., for optical fibers, heat- and thermal degrdn.-resistance)

429-60-7 CAPLUS RN

Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN

/ Structure 31 in file .gra /

83048-65-1 CAPLUS RN

Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN

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/ Structure 32 in file .gra /
L10 ANSWER 98 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN
                        1990:60646 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
                        112:60646
DOCUMENT NUMBER:
                        Hydrophobic coating of steel strip with an alkoxide or
TITLE:
                        acetonate
                        Izumi, Keiji; Deguchi, Takenori; Murakami, Megumi;
INVENTOR(S):
                        Tanaka, Hidetoshi
                        Nisshin Steel Co., Ltd., Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 4 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                        KIND DATE APPLICATION NO.
                                                                 DATE
     PATENT NO.
                                           ______
                                                                  _ _ _ _ _ _ _
                         _ _ -
                               _ _ _ _ _
     _____
                                          JP 1987-226138
                                                                 19870909
                               19890314
                         Α
     JP 01068477
                                           JP 1987-226138
PRIORITY APPLN. INFO.:
     The steel strip is coated with .gtoreq.0.005% total of an alkoxide, Me
AB
     alkoxide, and/or acetonate of Al, Zr, Ti, Si, W, Ce, Sn, and/or Y by using
     an alc. soln. contg. 0.005-0.30 mol% fluoroalkylsilane, and then heated at
     .gtoreq.100.degree. to form a hydrophobic layer resistant to wear loss.
     The coated strip shows high contact angle with water (100-122.degree.).
                                             ***85857-16-5***
                         ***83048-65-1***
       ***429-60-7***
IT
     RL: USES (Uses)
        (coating with alc. soln. contg., of steel strip for hydrophobic
        surface)
     429-60-7 CAPLUS
RN
     Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME)
CN
/ Structure 33 in file .gra /
     83048-65-1 CAPLUS ·
RN
     Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
CN
     heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
 / Structure 34 in file .gra /
     85857-16-5 CAPLUS
 RN
     Silane, trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA
 CN
     INDEX NAME)
 / Structure 35 in file .gra /
 L10 ANSWER 99 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN
                         1988:533014 CAPLUS <<LOGINID::20070829>>
```

ACCESSION NUMBER:

109:133014 DOCUMENT NUMBER:

Fluoroalkyl silane coating of stainless steel sheets TITLE:

Izumi, Keiji; Deguchi, Takenori; Murakami, Megumi INVENTOR(S):

Nisshin Steel Co., Ltd., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 6 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE APPLICATION NO. DATE KINDPATENT NO. ______ _____ _____ _ _ _ _ _____ 19861031 JP 1986-260477 19880521 Α JP 63116783 19861031 JP 1986-260477

PRIORITY APPLN. INFO.: The uncolored or colored stainless steel sheet is coated with Al, Zr, Ti, and/or Si, and then coated with a fluoroalkyl silane for resistance to finger prints. In coating, an alc. soln. contg. .gtoreq.0.005% alkoxide or acetyl acetonate of the metal is used to form a film at .gtoreq.100.degree. before the silane coating. Thus, an ultrasonically degreased stainless steel sheet was dipped in iso-PrOH contg. 0.1 mol Zr acetylacetonate, drawn at 2 mm/s, and heated 10 min at 200.degree. to form an OH group-contg. Zr film of .apprx.0.05 .mu.m thick. The coated sheet was dip-coated with iso-PrOH contg. 0.1 mol CF2CH2CH2Si(OMe)3 with post heating at 400.degree. for 5 min. The product resistant to finger prints showed water contact angle of 79.degree. vs. 24.degree. without the silane coating.

83048-65-1 ***429-60-7*** IT

RL: USES (Uses)

(coating with, of stainless steel sheet)

429-60-7 CAPLUS RN

Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME)

/ Structure 36 in file .gra /

83048-65-1 CAPLUS RN

Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)

/ Structure 37 in file .gra /

L10 ANSWER 100 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN

1987:516636 CAPLUS <<LOGINID::20070829>> ACCESSION NUMBER:

107:116636 DOCUMENT NUMBER:

Poly(phenylene sulfide) compositions TITLE: Yamaguchi, Toshihide; Izutsu, Hitoshi INVENTOR(S):

Dainippon Ink and Chemicals, Inc., Japan PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 5 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO.
                        KIND DATE
                                                                 DATE
    PATENT NO.
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                        ____
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                         Α
                               19861226
                                           JP 1985-137672
                                                                  19850626
    JP 61296063
                         R
                               19940413
    JP 06027263
                                           JP 1985-137672
PRIORITY APPLN. INFO.:
    Title compns. with excellent mech. and elec. properties, fluidity on
    molding, and adhesion to metals, useful as a potting material for
    electronic parts, printed circuit boards, and as connectors for elec.
    parts and instruments, contain poly(phenylene sulfide) (I), fibrous and/or
    silicate fillers, and perfluoroalkyl-contg. functional silane compds.
    Thus, I [inherent viscosity 0.14 (0.4 g/100 mL concd. .alpha.-
    chloronaphthalene, 206.degree.] 30, ***glass*** fibers (length 0.5 mm)
    20, fused silica (II) 50, and trifluoroethyltrimethoxysilane (III) 0.8
    part were mixed, melt kneaded, and pelletized to obtain a compn. with melt
    viscosity 600 P (330.degree., 10 g/cm2 extrusion pressure). Test pieces
     therefrom showed peel strength 0.7 kg/cm and vol. resistivity 1 .times.
     1016 (dry) and 1 .times. 1015 .OMEGA.-cm in the pressure cooker test
     (121.degree., 2 atm, 100 h), compared with 0.1 kg/cm and 1 .times. 1016
     and 8 .times. 1012 .OMEGA.-cm, resp., for test pieces from a compn. (melt
    viscosity 1000 P) contg. talc and N-(.beta.-aminoethyl)-.gamma.-
     aminopropyltriethoxysilane instead of II and III, resp.
                           ***110338-18-6*** , Trifluoroethyltrimethoxysilane
      ***101947-16-4***
IT
    RL: USES (Uses)
        (coupling agents, poly(phenylene sulfide) potting compns. contg., with
        good mech. and elec. properties)
     101947-16-4 CAPLUS
RN
     Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
CN
     heptadecafluorodecyl) - (CA INDEX NAME)
/ Structure 38 in file .gra /
     110338-18-6 CAPLUS
RN
     Silane, trimethoxy(2,2,2-trifluoroethyl) - (9CI) (CA INDEX NAME)
CN
/ Structure 39 in file .gra /
L10 ANSWER 101 OF 101 CAPLUS COPYRIGHT 2007 ACS on STN
                        1986:191664 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
                         104:191664
DOCUMENT NUMBER:
                         Low reflectance transparent material having
TITLE:
                         antisoiling properties
                         Matsuo, Masashi; Yamagishi, Nobuyuki; Noshiro, Makoto;
INVENTOR(S):
                         Jitsugiri, Yukio; Ohnishi, Keiichi
                         Asahi Glass Co., Ltd., Japan
PATENT ASSIGNEE(S):
                         Eur. Pat. Appl., 42 pp.
SOURCE:
                         CODEN: EPXXDW
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO.
                        KIND
                               DATE
     PATENT NO.
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EP 1985-107552

19850619

EP 166363

A2

19860102

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Α3
                                19861230
    EP 166363
                                19910807
                          B1
    EP 166363
        R: DE, FR, GB
                                            JP 1984-129992
                                                                   19840626
                                19860117
                          Α
    JP 61010043
                          В
                                19910329
    JP 03023493
                                            JP 1985-53317
                                                                   19850319
                                19860925
    JP 61215235
                          Α
                                          JP 1985-82169
                                                                    19850419
                                19861027
                         Α
    JP 61241143
                                19931005
                         В
    JP 05070655
                         A1
                                                                   19850620
                                            CA 1985-484686
                                19890718
    CA 1257513
                                                                   19861205
                                            US 1986-939296
                          Α
                                19870818
    US 4687707
                                                                A 19840626
                                            JP 1984-129992
PRIORITY APPLN. INFO.:
                                                                A 19850319
                                            JP 1985-53317
                                                                A 19850419
                                            JP 1985-82169
                                                                A1 19850619
                                            US 1985-746406
    Antisoiling low reflectance (<1.6%) coating materials as multilayers on
AB
       ***glass*** substrates are composed of a .ltoreq.0.3 .mu. metal oxide
     condensate layer and a .ltoreq.0.2 .mu. per- or polyfluorocarbosilane
     condensate layer prepd. by hydrolysis in an alc. solvent. Thus, a
       ***glass*** plate was undercoated by dipping in a mixt. contg. Si(OEt)4
     29.5, Ti(OBu)4 47.2, acetyl acetone 20.5, water 11.0, AcOH (1%) 2.1, EtOAc
     1.8, EtOH 157.8, and n-BuOH 81.0 wt. parts, withdrawing at 11 cm/min,
     drying, curing 30 min at 540.degree. to thickness 0.14 .mu. and n 1.80,
     dipping in 2% aq. HF 1 min, withdrawing, drying, and dipping in a reaction
     mixt. contg. (OMe)3SiC2H4C6F12C2H4Si(OMe)3 11.7, C9F19C2H4Si(OMe)3 5.1,
     Si(OMe)4 3.8, 1% aq. AcOH 4.4, di-Bu tin dilaurate 0.1, and tert-BuOH
     275.1 wt. parts, withdrawing at 4 cm/min, and heating 2 h at 160.degree..
     The top coating had a thickness 0.09 .mu. and a n 1.40.
       ***102116-01-8D*** , condensation products with silanes ***102116-04-1D*** , condensation products with
IT
     fluorooctylbistrimethoxysilane and Me silicate
     RL: USES (Uses)
        (antireflective-antisoiling optical coating materials contg.)
     102116-01-8 CAPLUS
RN
     Silane, trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-
CN
     nonadecafluoroundecyl) - (9CI) (CA INDEX NAME)
/ Structure 40 in file .gra /
     102116-04-1 CAPLUS
RN
     Silane, trimethoxy[3,4,4,4-tetrafluoro-3-(trifluoromethyl)butyl]- (9CI)
     (CA INDEX NAME)
/ Structure 41 in file .gra /
=> 17 and CVD
         73133 CVD
             9 L7 AND CVD
L11
=> d ibib abs hitstr 1-9
L11 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
                         2006:1265880 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
                         147:217655
DOCUMENT NUMBER:
```

Vapor phase modification of sol-gel derived titania TITLE:

(TiO2) surfaces

Piwonski, Ireneusz; Ilik, Aneta AUTHOR (S):

Department of Chemical Technology and Environmental CORPORATE SOURCE:

Protection, University of Lodz, Lodz, 90-236, Pol. Applied Surface Science (2006), 253(5), 2835-2840

SOURCE:

CODEN: ASUSEE; ISSN: 0169-4332

Elsevier B.V. PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

method was used in TiO2 surface modification. TiO2 layers ***CVD*** were obtained in sol-gel process and prepd. as thin films on Si wafers in dip-coating method. To define the influence of modification on TiO2 surface properties (e.g., friction), various types of fluoroalkylsilanes were used. The effectiveness of the modification was monitored by FTIR spectroscopy. The topog. and frictional measurements were studied using at. force microscopy (AFM).

429-60-7 , (3,3,3-Trifluoropropyl)trimethoxysilane IT ***101947-16-4*** , 1H,1H,2H,2H-Perfluorodecyltriethoxysilane

RL: NUU (Other use, unclassified); USES (Uses) (vapor phase modification of sol-gel derived titania (TiO2) surfaces)

429-60-7 CAPLUS RN

Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN

/ Structure 42 in file .gra /

101947-16-4 CAPLUS RN

Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN heptadecafluorodecyl) - (CA INDEX NAME)

/ Structure 43 in file .gra /

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

2005:492684 CAPLUS <<LOGINID::20070829>> ACCESSION NUMBER:

143:28195 DOCUMENT NUMBER:

Antisoiling thin films and their formation by TITLE:

atmospheric plasma ***CVD***

Arita, Hiroaki; Kudo, Kazuyoshi; Saito, Atsushi INVENTOR(S):

Konica Minolta Holdings, Inc., Japan PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 31 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005146324	Α	20050609	JP 2003-383496	20031113
PRIORITY APPLN. INFO.:			JP 2003-383496	20031113

MARPAT 143:28195 OTHER SOURCE(S):

The films showing surface resistivity 1 .times. 1012 .OMEGA./.box. at

23.degree. and relative humidity 55%, are formed by feeding gases contg. .gtoreq.10 vol.% N and organometallic compds. bearing fluoroorg. groups into into plasma, and exposing substrates to the excited gases. Uniform films showing good water repellency, oil repellency, and durability are formed by the above process. ***521084-64-0*** ***83048-65-1*** ***429-60-7*** IT RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process) (formation of antisoiling thin films by atm. plasma ***CVD*** gases contg. N and organometallic compds. bearing fluoroorg. groups) 429-60-7 CAPLUS RNSilane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN/ Structure 44 in file .gra / 83048-65-1 CAPLUS RNSilane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN heptadecafluorodecyl)trimethoxy- (CA INDEX NAME) / Structure 45 in file .gra / 521084-64-0 CAPLUS RN Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CNheptadecafluorodecyl)tripropoxy- (9CI) (CA INDEX NAME) / Structure 46 in file .gra / L11 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN 2005:322625 CAPLUS <<LOGINID::20070829>> ACCESSION NUMBER: DOCUMENT NUMBER: Laminates with good interlayer adhesion and their TITLE: manufacture Tejima, Katsuya INVENTOR (S): Dainippon Printing Co., Ltd., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 17 pp. SOURCE: CODEN: JKXXAF Patent DOCUMENT TYPE: Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE KIND DATE PATENT NO. -----_ _ _ _ _ _ _ _ _ _ _____ 20030925 JP 2003-334289 20050414 Α JP 2005096312 20030925 JP 2003-334289 PRIORITY APPLN. INFO.: MARPAT 142:374920 OTHER SOURCE(S): In title laminates comprising polymer substrates having hydrophilic surface groups, adhesion-improvement layers, and functional layers, the adhesion-improvement layers are obtained from self-assembled thin-film-forming substances having .gtoreq.1 groups for adsorption of self-assembled thin films and .gtoreq.1 groups for orientation of mols. to

give self-assembled thin films. The hydrophilic groups of the film-forming substances substitute for the orientation groups.

laminates are manufd. by (1) irradiating the substrates with energy for surface modification, (2) forming self-assembled thin films by , (3) substituting the orientation groups by the hydrophilic groups for removal of the orientation groups, and (4) forming functional layers on the resulting adhesion-improvement layers. The laminates are useful for packaging or display materials. Thus, a laminate comprising a PET substrate, a layer of self-assembled octadecyltrimethoxysilane thin film, and a SiO2 gas-barrier layer showed O permeability .ltoreq.1 mL/m2-day and water vapor permeability .ltoreq.1 g/m2-day. IT (Tridecafluoro-1,1,2,2-tetrahydrooctyl)triethoxysilane ***101947-16-4*** , (Heptadecafluoro-1,1,2,2-tetrahydrodecyl)triethoxysilane RL: TEM (Technical or engineered material use); USES (Uses) (self-assembled, adhesion-improvement layers; manuf. of laminates with good adhesion between polymer substrates and functional layers) 18395-30-7 CAPLUS RNSilane, trimethoxy(2-methylpropyl) - (CA INDEX NAME) CN / Structure 47 in file .gra / 51851-37-7 CAPLUS RNSilane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA CNINDEX NAME) / Structure 48 in file .gra / 101947-16-4 CAPLUS RN Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CNheptadecafluorodecyl) - (CA INDEX NAME) / Structure 49 in file .gra / L11 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN 2005:209979 CAPLUS <<LOGINID::20070829>> ACCESSION NUMBER: DOCUMENT NUMBER: Optical instruments having crack-free uniform TITLE: antisoiling surface layers and chemical vapor deposition apparatus for manufacturing them Kudo, Kazuyoshi; Arita, Hiroaki; Saito, Atsushi INVENTOR(S): Konica Minolta Holdings, Inc., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 36 pp. SOURCE: CODEN: JKXXAF Patent DOCUMENT TYPE: Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. KIND DATE PATENT NO. ______ _ _ _ _ JP 2003-293123 JP 2005062522 20050310 20030813 Α JP 2003-293123 20030813 PRIORITY APPLN. INFO.:

MARPAT 142:306128

The optical instruments (e.g., lenses) have antisoiling layers prepd. in

OTHER SOURCE(S):

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these steps: (i) introducing discharge gases (e.g., N) into discharge
           spaces (formed with high-frequency elec. field) to excite at around atm.
           pressure, (ii) bringing them into contact with source gases of
           organometallic compds. having F-contg. org. groups in spaces other than
           the discharge spaces to give indirectly excited gases, and (iii) exposing
            (metal oxide-surfaced) substrates to the gases. The organometallic
           compds. may be R1(R2R3MO)jMR4R5R6 (M = Si, Ti, Ge, Zr, Sn; R1-R6 = H,
           monovalent group; .gtoreq.1 of R1-R6 = F; j = 0-150), R1(R2R3MNR7)jMR4R5R6
            (M, R1-R6, j = same as above; R7 = H, alkyl), [RfX(CH2)kY]mMR8n(OR9)p (M =
            In, Al, Sb, Y, La; Rf = fluoroalkyl, fluoroalkenyl; X = linking group,
            divalent group; Y = linking group, O; R8 = alkyl, alkenyl, aryl; R9 =
            alkyl, alkenyl; k = 0-50; m + n + p = 3; m \cdot gtoreq.1; n, p = 0-2),
            Rf1(OC3F6)m1O(CF2)n1(CH2)p1Z(CH2)q1SiR23 (Rf1 = C1-16 perfluoroalkyl; R2 = C1-16 perfluoroalkyl; R3 = C1-16 perfluoroalkyli; R3 = C1-16 perfluoroalky
           hydrolyzable group; Z = OCONH, 0; m1 = 1-50; n1 = 0-3; p1 = 0-3; q1 = 1-6;
            0 < n1 + p1 .ltoreq. 6), and/or Rf[O(CF2)3]a[OCF(CH3)CF2]b(OCF2)c(OCF2CF2)
            \label{eq:doczf} \texttt{doczf}(\texttt{CF2}) = \texttt{[CH2CY[(CH2)mSiR213-nR22n]]pX} \quad (\texttt{Rf = C1-16 perfluoroalkyl}; \ \texttt{X = C1-16 perflu
            I, H; Y = H, lower alkyl; Z = F, CF3; R21 = hydrolyzable group; R22 = H,
            inactive monovalent org. group; a, b, c, d = 0-200; e = 0,1; m, n = 0-2; p
            = 1-10). Also claimed are deposition app. having a pair of opposed
            electrodes forming the discharge spaces, discharge gas suppliers, source
            gas suppliers, means for applying voltage between the electrodes, and
            substrate holders.
                                                                                                                              ***101947-16-4***
                                                                     ***83048-65-1***
                  ***429-60-7***
            RL: CPS (Chemical process); PEP (Physical, engineering or chemical
            process); TEM (Technical or engineered material use); PROC (Process); USES
                     (source gases; optical lenses having crack-free uniform antisoiling
                     surface layers and chem. vapor deposition app. for manufg. them)
             429-60-7 CAPLUS
            Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME)
/ Structure 50 in file .gra /
             83048-65-1 CAPLUS
             Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
             heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
/ Structure 51 in file .gra /
             101947-16-4 CAPLUS
             Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
             heptadecafluorodecyl) - (CA INDEX NAME)
/ Structure 52 in file .gra /
L11 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
                                                                   2004:718814 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
                                                                   141:252343
DOCUMENT NUMBER:
                                                                   Manufacture of organic thin-film transistors
TITLE:
                                                                   Hirai, Katsura; Kita, Hiroshi; Arita, Hiroaki
INVENTOR(S):
                                                                   Konica Minolta Holdings, Inc., Japan
PATENT ASSIGNEE(S):
                                                                   PCT Int. Appl., 81 pp.
SOURCE:
                                                                   CODEN: PIXXD2
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IT

RN

CN

RN

CN

RN

CN

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO.
                        KIND DATE
    PATENT NO.
                                           ______
                                                                  _ _ _ _ _ _
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                              _ _ _ _ _ _ _
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                             20040902 WO 2004-JP1705
                                                                  20040217
    WO 2004075279
                        A1
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
            BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
            MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
            GQ, GW, ML, MR, NE, SN, TD, TG
                                         EP 2004-711711
                        A1
                               20051116
    EP 1596428
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                           CN 2004-80004225
                                                                  20040217
    CN 1751385
                        Α
                               20060322
                                                               A 20030218
                                           JP 2003-39535
PRIORITY APPLN. INFO.:
                                                              W 20040217
                                           WO 2004-JP1705
    An org. thin-film transistor device with high carrier mobility and a
AB
    method for manufg. such a device are disclosed. The org. thin-film
    transistor was characterized in that it comprises a thin film which is
    produced by ***CVD*** using a reaction gas and whose surface has a
    contact angle of pure H2O .gtoreq.50.degree. and an org. semiconductor
    layer formed on the thin film.
                        ***83048-65-1***
      ***681-97-0***
IT
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (formation of base layers in manuf. of org. thin-film transistors)
    681-97-0 CAPLUS
RN
    Silane, triethoxy(3,3,3-trifluoropropyl) - (7CI, 8CI, 9CI) (CA INDEX NAME)
CN
/ Structure 53 in file .gra /
     83048-65-1 CAPLUS
RN
    Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
CN
    heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
/ Structure 54 in file .gra /
                              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L11 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
                        2004:271350 CAPLUS <<LOGINID::20070829>>
ACCESSION NUMBER:
                         140:293288
DOCUMENT NUMBER:
                         Pattern-mounted macromolecular supports, their
TITLE:
                         fabrication, and functional devices including the same
                         Tejima, Katsuya; Takai, Osamu; Sugimura, Hiroyuki;
INVENTOR(S):
                         Inoue, Yasushi
                        Dainippon Printing Co., Ltd., Japan
PATENT ASSIGNEE(S):
                         Jpn. Kokai Tokkyo Koho, 27 pp.
SOURCE:
```

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT ASSIGNEE(S):

PATENT INFORMATION:

DATE APPLICATION NO. DATE KIND PATENT NO. ---------_____ 20040402 JP 2002-260405 20020905 Α JP 2004098351 JP 2002-260405 PRIORITY APPLN. INFO.: In the process, macromol. supports are exposed to high energy rays to possess fine unevenness of roughness 5-200 nm on surface, coated with highly repellent layers at 1-150-nm thickness by vapor deposition, and exposed patternwise to high-energy rays in reactive atm. to have hydrophilic patterns. The repellent layers may be org. Si materials SixOyCzH.alpha. and the hydrophilic layers may be silica. The repellent layers may be SAM (self-assembled monolayer) adsorbed on the supports with functional groups patternwise converted to hydroxyl groups. Color filters having pixel elements arranged along with the thus-formed patterns and printed circuit boards having metal wirings along with the thus-formed patterns, are sep. claimed. ***18395-30-7*** , Isobutyltrimethoxysilane ***51851-37-7*** IT (Tridecafluoro-1,1,2,2-tetrahydrooctyl)triethoxysilane ***101947-16-4*** , (Heptadecafluoro-1,1,2,2-tetrahydrodecyl)triethoxysilane RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (self-assembled, partially hydrophilized; formation of high-contrast wettability patterns on macromol. supports by high-energy exposure for functional device fabrication) 18395-30-7 CAPLUS RN Silane, trimethoxy(2-methylpropyl)- (CA INDEX NAME) CN/ Structure 55 in file .gra / 51851-37-7 CAPLUS RN Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA INDEX NAME) / Structure 56 in file .gra / 101947-16-4 CAPLUS RNSilane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN heptadecafluorodecyl) - (CA INDEX NAME) / Structure 57 in file .gra / L11 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN 2003:506568 CAPLUS <<LOGINID::20070829>> ACCESSION NUMBER: 139:89063 DOCUMENT NUMBER: Surface-modified composites and their production TITLE: Hebenstreit, Juergen; Hoyer, Thomas; Voigt, Ingolf; INVENTOR(S): Voigtsberger, Baerbel

Hermsdorfer Institut Fuer Technische Keramik E.V.,

Germany

SOURCE:

Ger. Offen., 6 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE KIND DATE APPLICATION NO. PATENT NO. ______ _____ ____ ------DE 2001-10163646 20011221 20030703 DE 10163646 A1 20011221 DE 2001-10163646 PRIORITY APPLN. INFO.: The surface-modified composite, which is water-repellent, dirt-repellent, antiadherent, wear-resistant, corrosion-resistant, and elec. insulating, consists of 3 component parts (1) a metal, plastic, or ceramic substrate, (2) a porous ceramic, metal, or cermet coating produced by plasma spraying, thermal spraying, powder sintering, deposition from a gas phase ***CVD*** , PVD), deposition from a liq. phase (e.g., sol-gel

technique), or electroplating, and (3) an inorg. org. nanocomposite material which fills out pores of the layer 2 and form a top coating layer. Porosity of the layer 2 is 2-35%, and pore diam. is 10 nm-10 .mu.m. The nanocomposite materials may be deposited in the form of a liq. precursor which is then dried and hardened (e.g., by UV light or microwaves). The composites are esp. suitable for exterior linings in

building industries. ***2550-02-9*** , Propyltriethoxysilane IT RL: TEM (Technical or engineered material use); USES (Uses)

(in nanocomposite layer for surface-modified composites)

2550-02-9 CAPLUS RN

Silane, triethoxypropyl- (CA INDEX NAME) CN

/ Structure 58 in file .gra /

429-60-7 , (3,3,3-Trifluoropropyl)trimethoxysilane TT ***51851-37-7*** , Tridecafluoro-1,1,2,2-tetrahydrooctyl)triethoxysilane ***101947-16-4*** , Heptadecafluoro-1,1,2,2-

tetrahydrodecyl)triethoxysila

RL: TEM (Technical or engineered material use); USES (Uses) (water- and dirt repellent in nanocomposite layer for surface-modified composites)

429-60-7 CAPLUS RN

Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME) CN

/ Structure 59 in file .gra /

51851-37-7 CAPLUS. RN

Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA CN TNDEX NAME)

/ Structure 60 in file .gra /

101947-16-4 CAPLUS RN

Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-CN

INDEX NAME)

```
/ Structure 61 in file .gra /
L11 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
                       ACCESSION NUMBER:
                        133:301735
DOCUMENT NUMBER:
                        Formation and patterning of organic monomolecular film
TITLE:
                        Shimoda, Tatsuya; Miyashita, Satoru; Takai, Osamu;
INVENTOR(S):
                        Sugimura, Hiroyuki
                        Seiko Epson Corp., Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 7 pp.
SOURCE:
                        CODEN: JKXXAF
                        Patent
DOCUMENT TYPE:
                        Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                        APPLICATION NO.
                                                                DATE
                        KIND DATE
     PATENT NO.
                                          _____
                                                                 _ _ _ _ _ _ _ _
     _____
                       ____
                                                                19990331
                                          JP 1999-94349
                              20001010
                        Α
     JP 2000282240
                              20070214
                        B2
     JP 3879312
                                          JP 1999-94349
                                                                19990331
PRIORITY APPLN. INFO.:
     A method for forming an org. monomol. film involves cleaning the surface
     of a substrate, making the surface hydrophilic, and depositing a
     fluorinated alkylsilane monomol. film on the substrate by a ***CVD***
     method. A method for patterning the monomol. film involves patternwise
     irradn. with a UV light or electron beam. A lithog. method is also
     described, which uses the patterned monomol. film as a resist film of an
     etching stopper.
       ***429-60-7*** , 3,3,3-Trifluoropropyltrimethoxysilane ***83048-65-
IT
1***
     , Heptadecafluoro-1,1,2,2-tetrahydrodecyltrimethoxysilane
       ***85857-16-5*** , Tridecaluoro-1,1,2,2-tetrahydrooctyltrimethoxysilane
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
                    and patterning of fluoroalkylsilane monomol. film for
        ( ***CVD***
        lithog. resist as etching stopper)
     429-60-7 CAPLUS
RN
     Silane, trimethoxy(3,3,3-trifluoropropyl) - (CA INDEX NAME)
CN
/ Structure 62 in file .gra /
     83048-65-1 CAPLUS
RN
     Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
 CN
     heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
 / Structure 63 in file .gra /
     85857-16-5 CAPLUS
 RN
     Silane, trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA
 CN
```

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L11 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
                        ACCESSION NUMBER:
                        127:310357
DOCUMENT NUMBER:
                        Coating of transparent water-repellent thin films by
TITLE:
                        plasma-enhanced
                                         ***CVD***
                        Takai, Osamu; Hozumi, Atsushi; Sugimoto, Nobuhisa
AUTHOR (S):
CORPORATE SOURCE:
                        Department of Materials Processing Engineering, Nagoya
                        University, Chikusa-ku, Nagoya, 464-01, Japan
                        Journal of Non-Crystalline Solids (1997), 218, 280-285
SOURCE:
                        CODEN: JNCSBJ; ISSN: 0022-3093
                        Elsevier
PUBLISHER:
                        Journal
DOCUMENT TYPE:
                        English
LANGUAGE:
    Transparent water-repellent thin films are prepd. by radio-frequency (rf)
                                    ***CVD***
                                                (PECVD) methods using
     and microwave plasma-enhanced
    organosilicon compds. and fluoro-alkyl silanes (FASs) as source gases.
     First we prep. the water-repellent films by using three kinds of FASs by
     rf PECVD. The obtained contact angles depend on the length of
    perfluoro-alkyl groups (-CnF2n+1-, n=1, 6 and 8) in FASs. The max.
     contact angle is about 108.degree. which is comparable to that for
    polytetrafluoroetylene (PTFE). Next we prep. the water-repellent films by
    mixing FAS and trimethylmethoxysilane (TMMOS) using microwave PECVD.
     films consist of silicon oxide contg. C-F and Si-CH3 bonds and has high
     water repellency. The fluorine concn. at the surface does not relate
     directly to the contact angle. The films prepd. by both PECVD methods are
     transparent in the visible region. PECVD is a suitable technique to prep.
     transparent water-repellent thin films at low substrate temps. (below
     100.degree.C).
                         ***83048-65-1***
                                              ***85857-16-5***
       ***429-60-7***
IT
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (precursor; coating of transparent water-repellent thin films by
        plasma-enhanced
                         ***CVD*** )
     429-60-7 CAPLUS
RN
CN
     Silane, trimethoxy(3,3,3-trifluoropropyl)- (CA INDEX NAME)
/ Structure 65 in file .gra /
     83048-65-1 CAPLUS
RN
     Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
CN
     heptadecafluorodecyl)trimethoxy- (CA INDEX NAME)
/ Structure 66 in file .gra /
     85857-16-5 CAPLUS
RN
     Silane, trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (CA
CN
     INDEX NAME)
/ Structure 67 in file .gra /
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THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

12

REFERENCE COUNT:

/ Structure 64 in file .gra /

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                 US2004-765361/AP
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E25
=> S E3
           1 US2004-765366/AP
L12
=> DIS L12 1
THE ESTIMATED COST FOR THIS REQUEST IS 1.18 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) / N:Y
L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
     AN
     141:168967
DN
    Development of substrate surface modification methods for biochemical
     immobilization in biochips
     Kim, Hun-Ki; Lee, Jung-Suk; Lim, Geun-Bae; Lee, Young-Sun
IN
     Samsung Electronics Co., Ltd., S. Korea
PΑ
     Jpn. Kokai Tokkyo Koho, 11 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
    Japanese
FAN.CNT 1
                       KIND
                              DATE
                                          APPLICATION NO.
                                                                DATE
     PATENT NO.
                                          _____
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                        - - - -
                        Α
                                          JP 2004-18353
     JP 2004229663
                              20040819
                                                                20040127
                        Α
                              20040804
                                          KR 2003-5486
                                                                20030128
     KR 2004069063
                                          EP 2004-1606
                        A2
                              20040901
     EP 1452232
                        А3
                              20050720
     EP 1452232
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2004185480 CN 1519562 PRAI KR 2003-5486	A1 A A	20040923 20040811 20030128		2004-765366 2004-10005810	20040127 < 20040128	
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DISCOUNT AMOUNTS (FOR QU.	ALIFYI)	NG ACCOUNTS)		SINCE FILE ENTRY -15.60	TOTAL SESSION -15.60	
STN INTERNATIONAL LOGOFF AT 09:00:50 ON 29 AUG 2007						